



## **Job Vacancy University of Regensburg | Number 22.311**

The University of Regensburg with its more than 20,000 students is an innovative and interdisciplinary oriented campus university with a broad range of academic disciplines and research activities for young people from Germany and abroad. The Chair of Machine Learning is a currently growing group at the newly established Faculty of Informatics and Data Science.

In recent years, new complex data has become available in many areas. At the Chair of Machine Learning we are interested, for example, in high-dimensional omics data and large databases of electronic health records (Big Data), where we work within various collaborations. Using machine learning (ML) methods, our chair enables the linking and analysis of such data, which can lead to fundamental new insights. Our focus is on statistical machine learning. Thus, a central part of our application driven work is also the rigorous theoretical investigation of the respective methods. The resulting mathematical understanding often enables the targeted development of new ML algorithms.

The Chair of Machine Learning invites applications for the position of a

### **Doctoral Researcher (Ph.D. candidate) or Postdoctoral Researcher (Postdoc) (m/f/d)**

to start at the earliest convenience.

This is a full-time position (40,1 hours per week), based on a fixed-term contract valid for a period of 3 years (§ 2 Abs. 1 WissZeitVG). The temporary employment takes place for the own scientific qualification (dissertation or habilitation). Remuneration is in accordance with pay grade E13 of the German public-sector collective agreement, TV-L. The position is suitable for part-time work.

### **Your project and responsibilities**

- Development of new Machine Learning (ML) methods in cooperation with various application partners:
  - Theoretical investigation with a focus on statistical properties
  - Implementation and code publication
  - Application to omics data from SFB 1350 project partners.
  - Extraction of interaction effects in decision tree ensemble methods
  - Investigation and development of ML methods for causal inference
  - Feature extraction for omics data with segmentation algorithms.
- Publication of research results and participation in international conferences
- Teaching (exercises, labs) on machine learning, statistics, and stochastics; teaching duties include 5 SWS (Semesterwochenstunden) of full-time work
- Supervision of student projects (e.g., bachelor and master theses)

## What we seek

- University degree (master's degree, diploma or equivalent) in mathematics, statistics, data science, computer science, physics or a related discipline completed with very good results
- Intrinsic motivation for innovative research and development topics and enjoyment of scientific work
- Willingness to work in an interdisciplinary manner
- Good didactic skills as well as a high motivation to impart knowledge and to continuously develop courses
- Very good programming skills in R, Python or Julia
- Reliability and sense of responsibility, creativity, as well as communication skills

## What we offer

- The opportunity to work on scientifically relevant research topics in Statistical Machine Learning
- The possibility of own qualification (e.g., dissertation or habilitation) in the topic area
- The possibility of flexible work organization within the requirements of the job
- Close professional cooperation in the team

The University of Regensburg aims to increase the proportion of women and therefore expressly encourages qualified women to apply. The University of Regensburg is particularly committed to support reconciliation of work and family life (for details visit <https://www.uni-regensburg.de/universitaet/personalentwicklung/familien-service>). Candidates with registered severe disabilities are given preference over non-disabled applicants who do not otherwise have statutory preferential status if their overall personal aptitudes, skills and qualifications are equal. Please, indicate the existence of a severe disability so that a representative for people with disabilities can be invited to the interview if requested. Please, also note that we will not cover travel and other expenses for personal interviews.

If you have any questions, please contact Prof. Merle Behr (e-mail:

[merle.behr@informatik.uni-regensburg.de](mailto:merle.behr@informatik.uni-regensburg.de) / Telephone: 0941 94368508).

We look forward to receiving your detailed application (including curriculum vitae, cover letter, relevant certificates, and contact details of reviewers), which should be sent in a single PDF file by e-mail to [merle.behr@informatik.uni-regensburg.de](mailto:merle.behr@informatik.uni-regensburg.de) by **December 15, 2022**.

This is the English translation of a German job advertisement published by the University Regensburg at [https://www.uni-regensburg.de/assets/universitaet/stellenausschreibungen/fuer\\_Forschung\\_und\\_Lehre/22\\_311\\_FakFIDS\\_WissMA\\_.pdf](https://www.uni-regensburg.de/assets/universitaet/stellenausschreibungen/fuer_Forschung_und_Lehre/22_311_FakFIDS_WissMA_.pdf). Only the original German text is legally binding.